WASHINGTON LETTER.

WASHINGTON, MARCH 26, 1895.

The chief characteristics of what remains of the public domain of the United States are clearly and concisely described by Mr. F. H. Newell in a novel and interesting report entitled "The Public Lands and their Water Supply."* The relative location and area of this domain is shown by a large colored map. The proportion in each State and Territory is illustrated by means of diagrams.

There is still vacant and open to settlement within the boundaries of the United States (not including the Territory of Alaska) an area comprising nearly 630,000,000 acres, or one-third of the total extent of the country. Within this vast extent there is an unknown area—amounting to scores of millions of acres—of forests and wooded lands.

The relative area of the various classes of public lands as compared with the whole land area of the United States is shown by the following table:

	SQUARE MILES.	ACRES.	PER CENT.
Vacant public lands	980,337	627,415,680	33.01
Indian reservations	131,689	84,280,960	4.43
Forest reservations	30,445	19,484,800	1.03
Lands disposed of	1,107,044	708,508,160	37.27
Area of older (19) States	458,195	293,244,800	15.43
Area of Texas	262,290	167,865,600	8.83
	2,970,000	1,900,800,000	100.00

Of the vacant public land, 17,166,080 acres are in the eastern part of the United States, the remainder is in the west, and mainly within the arid regions. The forest reservations are a new institution, having been created by Act of Congress of March 3, 1891.

By far the greater portion of the vacant public lands—over 95 per cent.—are classed as arid or semi-arid in character, and depend for their future value not so much upon altitude, mineral contents,

* Extract from the 16th Annual Report of the United States Geological Survey.

or geological structure, as upon the presence or absence of water. It is a fact now generally recognized that, owing to the scarcity of water, only a small proportion of the now public domain can be reclaimed for agriculture, but this amount, though small when compared with the whole area, is in the aggregate larger than the territorial extent of some of the States, and will sustain a population numbering millions.

Of the public land States,—that is to say, all States excepting the thirteen original, and six States subsequently admitted into the Union within whose limit the Government had no public land,—there are four in which all the vacant land has been disposed of. These are Illinois, Indiana, Iowa, and Ohio. The amount undisposed of in each of the remaining States and Territories varies very widely,—all the way from 1 to 99 per cent. of their respective areas. The public lands lying east of the 97th meridian,—a convenient central vertical line,—are well watered, while the greater part to the west are arid and almost desert-like. Judging from the past rate of disposal in the eastern division, it is safe to assume that within a decade the amount of vacant public land in these States will be insignificant. Over half of the vacant area lies in Arkansas and Minnesota, and in all the States of this division the tracts are, as a rule, widely scattered in relatively small bodies.

In the area west of the 97th meridian the greatest amount of public land is in Montana. The greatest proportion, however, is in Nevada, where, according to estimates, over 95 per cent. of the total area is still at the disposal of Congress. Next in the order of extent of vacant lands is California, with a little more than one-half the total area of the State. The smallest area in any western State is in Kansas—less than 2 per cent. More than three-fifths of the entire area of western public land States consists of open, treeless country.

In the western division the Government Reservations, so-called, occupy 162,134 square miles. The reserves are (1) Indian reservations (82,708,797 acres). These lands are being steadily diminished year by year, being in many cases allotted in severalty to the Indians, and the balance thrown open to settlement by the whites. (2) Forest reservations. This is a novel undertaking here, and somewhat in the nature of an experiment. Since the law providing for them went into effect (March, 1891), seventeen reservations, having an aggregate of 17,564,800 acres, have been set off. They are located in California, Colorado, Oregon, Washington, Wyoming and Arizona. There are none in the eastern part of the United

States owned by the National Government, but the State of New York has instituted a great park or forest reserve in the northern part of its domain. It is not unlikely that many of the older States will adopt this course, not only for supplying timber, but unpolluted water. (3) Military reservations. Of these the total extent is about 1,500,000 acres, lying almost entirely in the western public land States. These military reservations are abandoned from time to time, and eventually form part of the vacant public lands.

In the nature of "reservations," although not by the Government, are the immense tracts granted to railroad corporations, aggregating nearly 50,000,000 acres. These railroad lands extend in broad belts across the country, beginning at the 95th meridian, and include some of the most valuable areas within the States traversed. Through California and Oregon the belt trends north and south.

The main point developed by this report is that the value of the lands of this unoccupied third of the United States is dependent primarily upon the water supply. Much of it has been reclaimed by irrigation, but by far the greater portion cannot be irrigated, and has value mainly for pasturage and for forest growth.

FORESTRY.—The National Academy of Sciences, at the request of the Government, has had under consideration the matter of forest preservation. A commission consisting of notable scientific men has been informally designated to make an investigation of the subject in all its phases. The personnel of the commission is as follows: Charles S. Sargent, Alexander Agassiz, Henry L. Abbott, Prof. William H. Brewer, Arnold Hague and Mr. Gifford Pinchot. In addition to these Prof. Walcott Gibbs, President of the Academy, is an ex-officio member of the commission. All of these gentlemen will be recognized as having qualifications of the very first order for the contemplated investigations.

This is not a national forestry commission, clothed with authority to adopt measures for the preservation of forests on public lands. Its powers are limited to investigation and suggestion. The Academy is required under the terms of its charter to furnish the Executive Departments of the Government or Congress information and advice on questions of practical science when requested to do so. The request for this investigation originated with the Forestry Association during the session of the American Association for the Advancement of Science, last fall. The Secretary of the Interior was selected as the medium of communication

with the Academy of Sciences. The Secretary requested an official expression of opinion upon the following points:

1. Is it desirable and practicable to preserve from fire and to maintain permanently as forestry lands those portions of the public domain now bearing wood growth for the supply of timber?

2. How far does the influence of forest upon climatic soil and water conditions make desirable a policy of forest conservation in regions where the public domain is principally situated?

3. What specific legislation should be enacted to remedy the evils now existing?

The names of the men who have been appointed on the Commission are certain guarantees that any report made after personal investigation in the field will command the respectful attention of Congress and of the public. Mr. Sargent is the author of The Sylva of North America, the finest of all works on trees yet published. He is also the author of Reports on the Forest Trees of North America, which formed (with an atlas) one of the monographs of the 10th Census. He is a professor at Harvard and director of the Botanical Garden and Arnold Arboretum. He was also chairman of the Adirondack Forest Commission of 1885. Alexander Agassiz has had extensive experience in California and the West, and was formerly Curator of the Museum of Natural History, Harvard. He is regarded as the first living authority on many subjects of natural history. Henry L. Abbott of the Corps of Engineers, U. S. A., has been connected with the surveys for the Pacific railroads and the Mississippi delta. He invented and developed the system of submarine mines for coast and river defense. His knowledge of the river system of the United States is very remarkable. Prof. Brewer was engaged in the geological survey of California; a professor of chemistry in California, and editor of *Botany*. He is now professor of agriculture at Yale College. Gifford Pinchot has had special training in foreign schools of forestry. He spends most of his time on Mr. Vanderbilt's estate, Biltmore, near Asheville, N. C., experimenting in practical forest economy. Arnold Hague, now of the Geological Survey, has been engaged on the survey of the 40th parallel, and on geological work in California and Utah.

Senator Teller's bill to protect public forest reservations provides that no public forest reservations shall be established except to improve and protect the forest within the reservation or for the purpose of securing favorable conditions of water-flow, and to insure a continuous supply of timber for the people of the States wherein such forests are located; but it is not his purpose to include

in forest reservations lands more valuable for mineral or agricultural purposes, and to this end his bill provides that any public lands embraced within the limits of any forest reservation which shall be found better adapted for mining or agricultural purposes than forest uses, may be restored to the public domain, and prospectors and mineral claimants shall have access to such forest reservations for the purpose of prospecting, locating and developing mineral resources.

BOARD OF IRRIGATION.—The latest development of the irrigation inquiry is the "Board of Irrigation, Executive Departments," established by authority of the Secretary of the Interior and Secretary of Agriculture, March 26, 1895. The objects of the Board are the correlation of the several lines of distinct yet related work for irrigation carried on by different departments of the Government, and the discussion and rendering of opinions upon such matters pertaining to irrigation as may be brought before the Board. Its functions are advisory as regards the interpretation and execution of Federal laws concerning irrigation, and also as to coöperation and specialization of work in various bureaus.

The membership of the Board consists of the Director of the Geological Survey, C. D. Walcott; the Chief of the Weather Bureau, Willis L. Moore; the Commissioner of Indian Affairs, Dr. M. Browning; the Ass't Commissioner of the General Land Office, E. A. Bowers; the Chief of the Office of Irrigation Inquiry, C. W. Irish; the Chief of the Hydrographic Division of the Geological Survey, F. H. Newell; the Chief of the Division of Agricultural Soils of the Dep't of Agriculture, Milton Whitney; the Chief Topographer of the Geological Survey, Henry Gannett; the Chief of the Forestry Division, Dep't of Agriculture, B. E. Fernow; the Chief of the Division of Vegetable Physiology and Pathology, Dep't of Agriculture, B. T. Galloway.

Following its line of duty, the Board resolved to prepare brief statements of the following: (1) Existing legislation relative to irrigation; (2) the work hitherto done by the various divisions, whether published or unpublished; (3) the lines and methods proposed to be pursued by each division for the future; (4) the deficiencies and difficulties experienced which might be remedied by coöperative action.

The first three points have been covered by a Preliminary Report, recently printed, which includes also a bibliography of official reports on irrigation, 1879 to 1895. An examination of this bib-

liography reveals the fact that Government methods in dealing with great economic questions are not always of the first order; for on this subject of irrigation alone one finds at different periods reports from the State, War, Treasury, Interior and Agricultural Departments, Special Agents, Census Office, Senate Special Committees, Commissioner of Indian Affairs, Geological Survey, Bureau of Statistics, Signal Office, Corps of Engineers, and one or two Special Commissions. At the present time the subject is under treatment both in the Interior and Agricultural Departments. The creation of this Board for the purpose of "correlating the several lines of distinct yet related work for irrigation carried on by different deparments" would seem to have been too long delayed.

DEEP WATER-WAYS.—A bill was recently introduced in both the Senate and House, that comprehends a great public benefit and does not demand either a loan or a subsidy. All that is asked is a charter under the name of "Maritime Canal Company" to construct a ship-canal not less than 300 feet wide and 26 feet in depth to connect the Great Lakes with the Atlantic. If permission is granted, the Company agrees to complete a canal in ten years, all on American soil, that will make an ample ship route from Chicago to New York City by way of Lakes Michigan, Erie and Ontario, the St. Lawrence River, Lake Champlain and the Hudson River. There are some well-known names among the incorporators.

Simultaneously there is another bill directing the Secretary of War to cause to be made accurate surveys and final estimates of cost of construction of a ship canal by the most practicable route wholly within the United States, from the Great Lakes to the Hudson River, of sufficient capacity to transport the tonnage of the lakes to the sea, and appropriates $50,000 for the purposes of the survey.

There is also pending a bill to incorporate the Lake Erie and Ohio River Ship Canal Company, to facilitate commercial intercourse by water between the Great Lakes and the Ohio and Mississippi rivers. The first name in the list of corporators is that of Andrew Carnegie.

Also a resolution to print for Congressional use an edition of the "Proceedings of the first annual convention of the International Deep Water-ways Association," a volume of 464 pages which traverses the "deep water movement" from the first proposition made one hundred and seventy-five years ago to the present time.

It is proposed to appoint a commission under the direction of the Secretary of War to survey the route for a ship canal from the

lower shore of Lake Michigan to the Wabash River, one terminus of which shall be the great harbor of Chicago, and which shall be navigable to the Wabash and the larger rivers flowing to the Gulf of Mexico by the way of the mouth of that river. There have already been two surveys of the main line of this route; one by Col. Stansbury in 1832, the other by Major Gillespie in 1876. Both these surveys fulfilled the requirements of science, but they were made with reference to an ordinary canal, securing a depth of from 4½ to 5 feet of water. The proposed canal route runs through a portion of the country destined to be the most densely settled part of the Union west of the Alleghanies. It will afford the most direct route without breaking bulk from the Lakes to the Gulf. From a military point of view its importance can hardly be over-estimated.

CRIPPLE CREEK DISTRICT, so called, the scene of recent remarkably geographic development, by reason of phenomenal gold production, lies between Beaver and Oil creeks, two tributaries of the Arkansas River. It covers an area of six miles in length by five and a half in width, from seven to twelve miles southwest of Pike's Peak, in the western part of El Paso County, Colorado. It is near the centre of the territory embraced in the Pike's Peak sheet of the Geologic Atlas of the United States. The general elevation of the district is 9,000 to 10,800 feet above sea-level. The creek from which the town and mining district derives its name is one of the numerous branches of Oil Creek which cut deep canyon gorges on the way to the main stream.* The mining camp is reached by waggon roads from Florissant and Divide on the north, from Colorado Springs on the east, and from Canyon on the south. Recently railroads have been built into the district.

That part of the State has been well known to miners and ranchmen for many years. Thousands of prospect pits and trenches dot the slopes of hills on all sides, showing futile efforts at earlier dates to discover the precious metal which has been latent for ages.

The district is essentially a producer of high-grade gold ores. Some of the mines ship no ore averaging less than $100 per ton; a few have a production averaging over $200 per ton, and if rumors are true, very much more. Successful mining was started in 1892. In 1894 the number of mines more or less developed amounted to over 100, and the product to that date was over $7,000,000. The town of Cripple Creek is incorporated, and has telegraphs, electric lights,

* Geology and Mining Industries of Cripple Creek District; by Whitman Cross and R. A. F. Penrose, Jr.

daily papers, large hotels, etc. Outside of Cripple Creek are numerous smaller settlements and towns, so that the total population of the district is estimated at 15,000.

MINERAL RESOURCES OF THE UNITED STATES, 1894.—The form of this volume changes this year from ordinary octavo to the royal octavo. It has been divided into two volumes, and forms Parts 3 and 4 of the always attractive Annual Report of the Geological Survey. Part 3 is devoted to the mineral products which are chiefly sold in metallic form. Part 4 treats of non-metallic minerals and such metallic compounds as find direct use without preliminary reduction to the metallic condition. The treatment of subjects is wide and very generous; by no means confined to productions in the United States, but including geographic discussion of the mineral resources of the world. The charts, diagrams and maps are of special interest.

New York, formerly one of the most important of the iron-producing States, has fallen to the lowest rank of which there is record, viz., tenth. Michigan and Minnesota are now the great producing States, the product of the latter showing the greatest increase.

STATUS OF THE PACIFIC CABLE.—Following the failure in the House of Representatives of the amendment attached by the Senate to the Diplomatic and Consular Appropriation bill in February, 1895, which amendment authorized the President to contract for the entire work of laying a telegraph cable between the United States and the Hawaiian Islands, the President of Hawaii on the 12th of August approved an act which had been passed by the Legislature, "to facilitate the construction and maintenance of telegraphic cables in the Pacific." It was an enabling act, and authorized the President of the Hawaiian Republic to contract with persons, corporations or governments for constructing, maintaining and operating telegraphic cables with the countries bordering on the Pacific Ocean. Closely following on this act a concession was granted to Z. S. Spalding "for laying, working and maintaining submarine telegraph cables from San Francisco to Honolulu and the several Hawaiian Islands," with exclusive right and subsidy for twenty years. It is provided in the concession that the construction of the cable shall begin on or before May 1, 1897, and be completed not later than Nov. 1, 1898. It is stated that Mr. Spalding and his associates are men of probity, enterprise, business ability and of sufficient means. He is well and favorably known in Honolulu, where he has large business interests, in the United States and

England. The amount of subsidy granted, dependent upon the United States joining in this undertaking by granting substantial assistance, is $40,000 per annum.

Following this the Pacific Cable Company was organized under the laws of New Jersey, and is the successor and assign of Mr. Spalding's interest. Among the stockholders are A. S. Hewitt, D. O. Mills, G. M. Dodge, F. D. Grant, Wager Swayne, Z. S. Spalding and others.

Soon after the opening of the present Congress, in December, 1895, Mr. McCormick introduced into the House of Representatives a bill "To provide for telegraphic communication between the United States, the Hawaiian Islands and Japan"; and in January of the present year Senator Hale of Maine introduced a bill "To facilitate the construction and maintenance of telegraphic cables in the Pacific Ocean for the use of the Government in its foreign intercourse." This bill gives the Postmaster-General authority to contract with the Pacific Cable Company for transmission by electrical means between San Francisco and Honolulu of all messages on the business of the United States for twenty years, from July 1, 1897, and the United States is committed to the subvention in round numbers of about $250,000 per annum. The Government reserves the right to take over the ownership of the line at any time before the expiration of twenty years.

Mr. McCormick's bill proposes to give to a company of the same name—Pacific Cable Company,—but organized under the laws of New York, the privilege of constructing and operating telegraph lines from a point or points of the Pacific coast to Pearl River Harbor in the Hawaiian group, and from Pearl River Harbor to such other islands in the Pacific Ocean and Japan as it shall be authorized to connect by lines or cables. The United States agrees to pay during twenty years from the completion of the cable the yearly sum of twenty-five dollars per nautical mile, not to exceed 7,250 miles, or $181,250.

These projects have not yet been acted upon by Congress, and although no immediate outlay of money is contemplated, it is not unlikely that political necessities may demand postponement.

ALASKA BOUNDARY.—Mr. Squire in the Senate (January 3) and Mr. Pitney in the House (February 12) made statements concerning the status of this question.

The occasion giving rise to the statements was a resolution reciting that in view of the expediency of forthwith negotiating a

convention with Great Britain for marking convenient points upon the 141st meridian of west longitude where it forms the boundary line between Alaska and British North America, and to enable the President to execute the provisions of such convention without delay when concluded, the sum of $75,000 be appropriated to defray the share of the United States in the joint expense of locating the meridian and marking the boundary by an international commission.

The Alaskan boundary is conveniently divisible into two sections. The first, where it follows the contour of the coast from the southern-most point of Prince of Wales Island until it strikes the 141st meridian at or near the summit of Mount St. Elias; the second, where it is formed by the 141st meridian, which it follows from that intersecting point to the frozen ocean. The preliminary survey of the first section by Joint Commission has been going on since 1893, and is now completed, but up to the present date no report of its conclusions has been presented to our Congress. When so presented it can only present data for the information of the respective Governments, upon which when the entire examination shall be completed the two nations may be duly advised, so as to enable them more intelligently to enter into a treaty. It is stated, however, on authority, that the American surveys have demonstrated the fact that there is no range of mountains such as at the time the treaty was concluded between Russia and Great Britain was assumed to exist, and no range of mountains to which the language of the Russian treaty of 1867 can apply. Therefore, the claim on behalf of the United States is and must be that the Territory of Alaska, that is to say, the southeasterly portion of it, shall be bounded to the eastward by a line distant 10 marine leagues from the coast, following the windings of that coast.

The second section is the true location upon the surface of the earth of the 141st meridian, to be ascertained by astronomical survey. The meridian has been located upon the principal water courses which form the highways by means of which miners and other immigrants enter the country,—such as the crossing of Forty Mile Creek, and at the Yukon River. Much time and care is still required to secure the accuracy of observations already made, and to reduce errors to so small a degree that they will be practically immaterial. It should be understood that the Commissions of the two Governments who have been working on this matter have authority only to examine, survey and report. They were not created for the purpose of coming to any agreement so as to bind their Govern-

ments. The data collected will afford the basis for a treaty between the United States and Great Britain relative to the southeastern boundary, and it is not unlikely that a convention for this purpose and for marking convenient points upon the 141st meridian is near at hand.

It is proposed that the Coast Survey by proper reconnoissance ascertain whether there is not a southern channel entrance to the Yukon River for sailing vessels, which would obviate the necessity for going as far north as Norton Sound, at which point freight and passengers are now transferred to Yukon River steamers, and also make a thorough survey of the mouth or mouths, if more than one, of said river.

A bill pending in Congress provides for the election of a delegate to that body from Alaska. The Territory now has a population much larger than had twelve Territories (now States) at the census nearest the date of their organization as Territories. The business of Congress as well as of the Departments is increasing to such an extent that an accredited agent or delegate is almost an imperative necessity.

NORTHERN BOUNDARY.—The President is to be requested to enter into negotiations with the Government of Great Britain for the adjustment of the part of our northern boundary between Lake Superior and the Lake of the Woods. There has never yet been a complete survey, location and mapping of this line. The treaty of 1783 defined it only in general and uncertain terms; the treaty of 1794 pledged a joint survey in that quarter; the treaty of 1815 made provision for a commission for the purpose; the treaty of 1842 recited with some particularity the names of several lakes and their connecting waters as forming such boundary. Dispute concerning the ownership of certain islands along the boundary, and the prospective rapid development of the adjacent country, have brought prominently forward the necessity for an accurate survey.

NEW EXPLORATIONS.—One of the bits of exploratory work initiated in Washington last year was that of W J McGee, ethnologist-in-charge of the Bureau of American Ethnology. Leaving Washington toward the end of October, he outfitted at Tucson and proceeded thence through southwestern Arizona and western Sonora to the country of the Seri Indians, comprising Tiburon Island in the Gulf of California, and a considerably larger area on the adjacent mainland. On the island are 500 square miles of territory

and on the mainland 2,500 more. The entire tract is mountainous. Tiburon Island embraces half a dozen ranges with peaks of 3,000 to 4,000 feet.

He was accompanied by Mr. Willard D. Johnson, one of the best known and most skilful topographers of the U. S. Geological Survey, who made a plane-table survey of the territory traversed by the party.

The entire region is arid, and portions are uninhabitable desert, and for this and other reasons it has never been surveyed. There is but one feeble stream, and its waters are evaporated before reaching the Gulf. There are some springs, but they are widely separated. The party carried water from seven to fifteen miles to their various camps from these springs. In addition to natural obstacles, the portion of the area known as Seriland has been defended against white invasion by the blood-thirsty inhabitants so effectively that their mountains and valleys have hardly been seen by white men, save from a distance, or from vessels coasting the adjacent waters. The expedition spent about a month in Seriland, making topographical surveys and collecting archæologic and ethnologic data, though the natives, always warlike, were so exceptionally hostile that they kept out of the way of the explorers. They were seen on the borders and photographs of them were occasionally secured, but after the party entered their land the savages kept out of the way. They would abandon their homes and towns as the initial party of explorers approached.

The Seri Indians have been known since the time of Coronado as savage warriors, using poisoned arrows, and they are generally thought to be cannibals. This, however, Mr. McGee doubts, but he is certain of their desire to kill all men except their own. They have a few guns, and occasionally a man with a hat is seen, but these are the ones nearest the border. During the historic period, their number has diminished through constant warfare from about 2,000 to 350 or less, mostly women and children. They are entirely without agriculture, and live largely on sea-food, commonly eaten raw; they navigate the adjacent waters in reed canoes, use the bow and arrow effectively, and wear short skirts, sometimes supplemented by robes or blankets, both made of pelican skins. They are of large stature, and are remarkable for strength, speed and endurance. In physical characteristics, language, arts, and habits of life, they appear to be distinct, constituting a separate stock or family. They are the most irreconcilable to civilization of any savages on the American continent. From historical rec-

ords it is known that the Seri have been engaged in practically continuous warfare against all peoples for two or three centuries, and their archæology and some of their characteristics and customs indicate that they have been inimical to neighboring tribes for many centuries.* They are greatly dreaded by the Mexicans as well as by the other native tribes, and will undoubtedly become extinct at an early day.

The 14th Annual Report of the Bureau of Ethnology, which is now in the printer's hands, will comprise two parts instead of one, as hitherto. The first part will consist almost wholly of a memoir on "The Menomini Indians," by Dr. W. J. Hoffman. This tribe was found by Nicolet in 1634, but has thus far received no scientific attention. The work will embrace an exposition of ceremonials of initiation into the Cult society, generally designated as the Grand Medicine society, and will be a completion of the same work rendered with reference to the Ojibwa Indians, which was for the first time made public by the same writer in the 7th Annual Report. The present memoir will embrace also the mythology, social customs, totemic organization, arts and manufactures, and will conclude with a comprehensive vocabulary, with critical notes on Menomini geographic terms.

The second part of this report will contain an account of Coronado's journey to Cibola and the Great Plains in 1540–1542, with all the Spanish documents, and English translations, notes, and a bibliography, by George Parker Winship. Also, The Ghost Dance, by James Mooney.

The 13th Annual Report, which is nearly off the press, contains the following interesting papers: (1) Prehistoric Textile Fabrics of Eastern United States; by W. H. Holmes. (2) Stone Art; by Gerard Fowke. (3) Aboriginal Remains in Verde Valley, Arizona; by Cosmos Mindeleff. (4) Omaha Dwellings, Furniture, and Implements; by J. Owen Dorsey. (5) Casa Grande Ruins; by Cosmos Mindeleff. (6) Zuñi Creation Myths; by F. H. Cushing.

Mr. F. W. Hodge, of the same Bureau, is preparing for publication an index of the six quarto volumes of Schoolcraft's great work on the Indian Tribes of the United States. It will contain approximately 25,000 references.

GEOGRAPHIC NAMES.—The United States Board on Geographic Names announces decisions from October, 1895, to March, 1896.

* *American Anthropologist*, March, 1896.

There are 262 in all. The following corrections, alterations, or changes occur in New York:

Bemis Heights, Saratoga County.—Not Bemus Heights.

Blodget; hill in Coeymans, Albany County.

Brunswick Center, Rensselaer County.—Not Center Brunswick.

Chuctanuda (North and South); two creeks in Montgomery County.

Crandell Corners, Washington County.—Not Crandall's Corners.

Cropseyville, Rensselaer County.—Not Cropserville.

Feurabush, Albany County.

Feuri Spruyt, Albany County.—Not Spraigt Kill.

Gardiners Island, east of Long Island.—Not Gardner.

Glenmont, Albany County.—Not The Abbey.

Halfmoon, Saratoga County.—Not Half Moon.

Haynersville, Rensselaer County.—Not Haynerville.

Lauson, Albany County.—Not Lawton.

Putts; creek in Essex County.—Not Putnams.

Quackenkill, Rensselaer County.

Slingerlands, Albany County.—Not Slingerland.

Tackawasick; creek in Rensselaer County.—Not Ts-ats-awassa, nor Cummings.

Vloman; kill (or creek), Albany County.—Not Vlamans Kil, nor Vlauman Kill.

The Board decides that the name of the Argentine Republic in South America is Argentina.

Ocean Travel.—General J. A. Dumont, the Supervising Inspector-General of Steam Vessels, recently made the following interesting statement for the information and possible relief of mind of timid persons who fear to make an ocean voyage, or if they do so, and while on board a steamer, are in constant trepidation, to the discomfort of themselves and their associates on such a voyage. He said:

"A comparative statement of the dangers by land and sea, as shown by official records on the subject, shows that as a rule life is safer to-day on an ocean steamer than when travelling by railroad or any other vehicular mode of travel; in fact, safer than is pedestrian travel in large cities, or while engaged in the ordinary employments of life on land. For instance, in the twenty years ending June 30, 1895, there were reported 100 ocean and coastwise steamers lost. Total number of lives lost, 776, or an average loss per annum of less than 39 persons, while on the railroads of the United States during the five years ended June 30, 1894, there were killed, as reported at the Interstate Commerce Commission, 34,304 persons, including passengers and employees, or an annual average of 6,861 persons killed.

There are no statistics in this country, that I am aware of, from which data can

be obtained as to the number of people killed in general employments, but I am informed that Germany keeps a record of all accidental loss of life among workmen, and I have seen an apparently authentic statement in a newspaper lately that the German records show a loss of life from accidental causes of 39,000 workmen from October 1, 1885, to December 31, 1893, a period of eight years and three months, or an annual average of 4,727 such persons, which annual average is over six times the number of persons, passengers, and employees lost on ocean steam vessels in twenty years.

While the above statements show that there is no absolute preventive against accidental loss of life, either on land or water, they also show that the United States, by its beneficent laws and faithful execution thereof by its duly appointed officers, has reduced the losses of life on steam vessels to a minimum not reached by any other maritime nation."

MARINE CONFERENCE.—It is proposed to convene the delegates of the United States to the late International Marine Conference to reconsider the revised international rules to prevent collisions at sea. In 1894 an understanding was reached by the principal maritime Powers that these rules should go into effect March 1, 1895. This understanding was broken by a change of position of the British Government, which in January, 1895, notified the United States that until Parliament had been consulted it could not agree to the date fixed. Several other nations also withdrew their assent, and by act of Congress the date was postponed. It is expected that the final views of the British Government will be received soon. The object of the reconvention is to consider whatever amendments may be proposed and report its conclusions to Congress for final action.

AERIAL NAVIGATION.—It is proposed to award $100,000 from the Treasury of the United States to any person who shall prior to the year 1901 construct an apparatus that will demonstrate the practicability of safely navigating the air, at a speed of not less than 30 miles an hour, and capable of carrying passengers and freight weighing at least 400 pounds. Also $25,000 for an apparatus that will demonstrate the practicability of safely navigating the air in free flight toward any desired point of the compass for a distance of one mile or more in a descending line; the point of alighting to be not more than 65 feet lower than the point of starting. No use to be made of any gas lighter than air.

HISTORICAL.—Senator McMillan has a bill before Congress appropriating $25,000 for the preparation and publication of the Revolutionary Archives in the Department of State. Senator Daniel has another, appropriating $20,000 for the purchase of the

papers and correspondence of Jefferson, now in the possession of his great-grand-daughter. Senator Chandler, still another appropriating $10,000 for the unpublished correspondence and manuscripts of Monroe known as the Gouverneur collection. Numerous petitions have been circulated asking for the publication entire and complete of the Journals of the Continental Congress.

INDIANOLA TERRITORY.—Congress is considering the advisability of creating a territorial form of government, by the name of the Territory of Indianola, for the Five Civilized Tribes now occupying the Indian Territory; the right of suffrage to be accorded to all male citizens and Indians over the age of twenty-one years who are actual residents of the Territory.

NOTES.—The Venezuelan Commission recently received the report of Justin Winsor, who was intrusted with the difficult task of going over 300 maps of the Venezuela-Guiana territory. These maps came from all available sources, including the collection of the State Department, Congressional Library, etc. Mr. Winsor has been tracing back these various maps to establish the basis and authority for them. This has resulted in eliminating a great part of them, as they were reprints. The conclusions of Mr. Winsor are regarded as important in the development of the case.

The representatives of various governments which make decennial enumerations of the people are making efforts to secure uniformity in the inquiries to be used in future censuses. It is proposed in Congress that the Commissioner now in charge of the United States Census correspond with the census officers of other countries for the purpose of securing such uniformity, and also report a plan for a permanent census service.

A Washington branch of the American Institute of Archæology was recently organized. The objects of the society are, in the main, those of the general society, whose headquarters are at Boston, to wit, the prosecution of archæological research in this country and abroad, and the formation at Rome of an American Society similar to that now in operation at Athens. Secretary, Dr. A. P. Montague, of Columbian University.

In the interest of good roads Representative C. W. Stone pro poses (by bill) to create a special commission on highways to consider the expediency of, and best methods of, providing for the scientific location of highways on the public domain; the employment of the Geological Survey in the discovery of road materials; the free testing of all road materials offered; the construction of

model roads and instructions in road-making. The National League of Good Roads, and the League of American Wheelmen, both strong organizations, are strenuously and vigorously advocating the measure.

The Directory of the Scientific Societies of Washington (8th publication) shows a total membership of 1,851 for seven societies; an increase of 1,046 in eight years. These figures represent resident, active and life members only, honorary and non-resident members aggregating 455 more.

A bill before Congress proposes to annex a portion of Arizona to the State of Utah; that is to say, that portion of Arizona lying north of the middle of the channel of the Colorado River and west of the eastern boundary of Utah. H.